

We claim:

1. A method for incremental adaptation of a computer software application, said method comprising the steps of:

5 receiving a request for a component of said application from a device operated by a user of said application;

identifying, in response to said request, components of said application that may be requested by said user in the future; and

10 adapting said identified components for operation with said requesting device.

2. The method of claim 1, wherein only said requested and identified components are adapted for operation with said requesting device.

15 3. The method of claim 1, wherein said components are adapted within a specified maximum time period.

4. The method of claim 1, wherein components of said application comprise Internet webpages.

20 5. The method of claim 1, comprising the further step of:  
performing, in response to said request, a reachability analysis to identify components reachable from said requested component; and

25 wherein said step of identifying comprises selecting components from said identified reachable components that are within a specified distance of said requested component.

30 6. The method of claim 5, wherein said specified distance comprises an integer value greater than or equal to one, said value representative of a number of transitions between two components of said application.

7. The method of claim 1, wherein said step of identifying comprises identifying components with a high probability of being requested based on historical request patterns relating to said application.

5 8. The method of claim 7, wherein said historical request patterns relate to requests from a substantially similar requesting device.

9. The method of claim 8, wherein said components are identified taking previously incorrect identification of components that may be requested into account.

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10. The method of claim 1, wherein said step of identifying comprises identifying the maximum number of components neighbouring said requested component that can be adapted within a specified period of time.

15 11. A method for incremental adaptation of a computer software application, said method comprising the steps of:

receiving a request for a component of said application from a device;

identifying, in response to said request, components reachable from said requested component;

20 selecting components within a specified distance of said requested component from said identified reachable components; and

adapting said selected components for operation with said requesting device.

25 12. An apparatus for adaptation of a computer software application, said apparatus comprising:

at least one communications interface for transmitting and receiving data;

a memory unit for storing data and instructions to be performed by a processing unit; and

30 a processing unit coupled to said at least one communications interface and said memory unit, said processing unit programmed to:

receive a request for a component of said application from a device operated by a user of said application;

identify, in response to said request, components of said application that may be requested by said user in the future; and

5 adapt said identified components for operation with said requesting device.

13. The apparatus of claim 12, wherein said processing unit is programmed to adapt only said requested and identified components for operation with said requesting device.

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14. The apparatus of claim 12, wherein said components are adapted within a specified maximum time period.

15. The apparatus of claim 12, wherein components of said application comprise Internet webpages.

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16. The apparatus of claim 12, wherein said processing unit is further programmed to:

perform, in response to said request, a reachability analysis to identify components reachable from said requested component; and

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identify reachable components for adaptation that are within a specified distance of said requested component.

17. The apparatus of claim 16, wherein said specified distance comprises an integer value greater than or equal to one, said value representative of a number of transitions between two components of said application.

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18. The apparatus of claim 12, wherein said processing unit is further programmed to identify components with a high probability of being requested based on historical request patterns relating to said application.

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19. The apparatus of claim 18, wherein said historical request patterns relate to requests from a substantially similar requesting device.

20. The apparatus of claim 19, wherein said processing unit is further programmed to identify components taking previously incorrect identification of components that may be requested into account.

21. The apparatus of claim 12, wherein said processing unit is further programmed to identify the maximum number of components neighbouring said requested component that can be adapted within a specified period of time.

22. An apparatus for adaptation of a computer software application, said apparatus comprising:

at least one communications interface for transmitting and receiving data;  
a memory unit for storing data and instructions to be performed by a processing unit; and  
a processing unit coupled to said at least one communications interface and said memory unit, said processing unit programmed to:  
receive a request for a component of said application from a device;  
identify, in response to said request, components reachable from said requested component;  
select components within a specified distance of said requested component from said identified reachable components; and  
adapt said selected components for operation with said requesting device.

23. A computer program product comprising a computer readable medium comprising a computer program recorded therein for adaptation of a computer software application, said computer program product comprising:

computer program code means for receiving a request for a component of said application from a device operated by a user of said application;

computer program code means for identifying, in response to said request, components of said application that may be requested by said user in the future; and

computer program code means for adapting said identified components for operation with said requesting device.

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24. The computer program product of claim 23, wherein only said requested and identified components are adapted for operation with said requesting device.

25. The computer program product of claim 23, wherein said components are adapted within a specified maximum time period.

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26. The computer program product of claim 23, wherein components of said application comprise Internet webpages.

15 27. The computer program product of claim 23, further comprising:

computer program code means for performing, in response to said request, a reachability analysis to identify components reachable from said requested component; and

computer program code means for identifying components for adaptation from said reachable components that are within a specified distance of said requested component.

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28. The computer program product of claim 27, wherein said specified distance comprises an integer value greater than or equal to one, said value representative of a number of transitions between two components of said application.

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29. The computer program product of claim 23, wherein said computer program code means for identifying comprises computer program code means for identifying components with a relatively higher probability of being requested based on historical request patterns relating to said application.

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30. The computer program product of claim 29, wherein said historical request patterns relate to requests from a substantially similar requesting device.

5 31. The computer program product of claim 30, wherein said components are identified taking previously incorrect identification of components that may be requested into account.

32. The computer program product of claim 23, wherein said computer program code means for identifying comprises computer program code means for identifying  
10 the maximum number of components neighbouring said requested component that can be adapted within a specified period of time.

33. A computer program product comprising a computer readable medium comprising a computer program recorded therein for adaptation of a computer  
15 software application, said computer program product comprising:

computer program code means for receiving a request for a component of said application from a device;

computer program code means for identifying, in response to said request, components reachable from said requested component;

20 computer program code means for selecting components within a specified distance of said requested component from said identified reachable components; and adapting said selected components for operation with said requesting device.

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